

**METHOD FOR INDUCTION OF NATURAL KILLER CELLS BY
DENDRITIC CELLS CULTURED WITH GM-CSF AND IL-15**

ABSTRACT OF THE DISCLOSURE

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The present invention provides a dendritic cell that can induce the proliferation and activation of natural killer cells. The dendritic cells, designated NK dendritic cells, are characterized by the expression of increased levels of CD80, CD1a, and CD86 as compared to a mature dendritic cell cultured in the presence of granulocyte-
10 macrophage colony stimulating factor (GM-CSF) and interleukin 4 (IL-4). Further, the dendritic cells are characterized by the expression of interleukin 12 (IL-12), tumor necrosis factor α (TNF α), and GM-CSF. The NK dendritic cells are produced by providing a cell population comprising low-adherence monocytic dendritic precursor cells that have been cultured in the presence of granulocyte-monocyte colony stimulating factor (GM-CSF) and
15 interleukin 15 (IL-15) and by contacting the cells with an effective amount of a dendritic cell maturation agent. NK dendritic cells are capable of inducing at least a 10-fold increase in the number of NK cells typically found in a sample of peripheral blood.

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